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#### STATE OF ARIZONA AQUIFER PROTECTION PERMIT NO. P-105724 PLACE ID 113173, LTF 78025 SIGNIFICANT AMENDMENT

#### 1.0 AUTHORIZATION

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Articles 1, 2 and 3, Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 1 and 2, A. A. C. Title 18, Chapter 11, Article 4 and amendments thereto, and the conditions set forth in this permit, the Arizona Department of Environmental Quality (ADEQ) hereby authorizes the Beaver Creek Preserve Inc, to operate the Beaver Creek Preserve Wastewater Treatment Plant, in the town of Rimrock, in Yavapai County, Arizona, over groundwater of the Upper Verde groundwater basin in Township 15 N, Range 05 E, Section 26, SW ¼, SE ¼, Gila and Salt River Baseline and Meridian.

This permit becomes effective on the date of the Water Quality Division Director's signature and shall be valid for the life of the facility (operational, closure, and post-closure periods) unless suspended or revoked pursuant to A.A.C. R18-9-A213. The permittee shall construct, operate and maintain the permitted facilities:

- 1. Following all the conditions of this permit including the design and operational information documented or referenced below, and
- 2. Such that Aquifer Water Quality Standards (AWQS) are not violated at the applicable point(s) of compliance (POC) set forth below or if an AWQS for a pollutant has been exceeded in an aquifer at the time of permit issuance, that no additional degradation of the aquifer relative to that pollutant and as determined at the applicable POC occurs as a result of the discharge from the facility.

#### 1.1 PERMITTEE INFORMATION

Facility Name: Beaver Creek Preserve Wastewater Treatment Plant

**Facility Address:** 6066 N Stratford Ct

Rimrock, Arizona 86355

County: Yavapai County

**Permittee:** Beaver Creek Preserve Inc.

**Permittee Address:** 10040 E. Happy Valley Rd. #597

Scottsdale, Arizona 85255

Annual Registration Fee Flow Rate: 7,500 gallons per day (gpd)

**Facility Contact:** Brad Bowers **Emergency Phone No.:** (928) 301-4697

**Latitude/Longitude:** 34° 38 '07" N/111° 48' 31" W

**Legal Description:** Township 15 N, Range 05 E, Section 26, SW ¼, SE ¼, Gila and Salt River

Baseline and Meridian.

#### 1.2 AUTHORIZING SIGNATURE

Trevor Baggion	re, Director, Water (	Quality Division
Arizona Departi	ment of Environmenta	l Quality
Signed this	day of	, 2020



#### 2.0 SPECIFIC CONDITIONS [A.R.S. §§ 49-203(4), 49-241(A)]

#### 2.1 Facility / Site Description [A.R.S. § 49-243(K)(8)]

The permittee is authorized to operate the Beaver Creek Preserve Wastewater Treatment Plant (WWTP) with a treatment capacity of 35,000 gallons per day (gpd). Due to the limited disposal capacity, the permittee is allowed to operate the WWTP with a maximum monthly average flow of 7,500 gpd only. The facility can increase the treatment capacity at the WWTP by adding additional disposal capacity per Section 3.0, Compliance Schedule Item 3.1.

The WWTP process consists of the headworks with a bar screen, two (2) anoxic tanks, two (2) aeration tanks with mixers, a clarifier, a filter, Ultra Violet (UV) disinfection, an emergency chlorination tank, an emergency storage tank, an aerobic sludge digester and an effluent pump station. During the low flows (approximately 1,100 gpd), the WWTP only operates one anoxic tank and one aeration tank. The facility may add a second UV disinfection unit if needed to meet the discharge limit for Fecal Coliform. The sludge is hauled off-site for management and disposal in accordance with state and federal regulations.

The effluent shall be disposed through a recharge well. Prior to injection, the effluent will undergo secondary treatment using a Sanitron UV Unit to insure that the all the fecal coliform will be removed from the Class B+ effluent. Disposal of effluent through the subsurface irrigation fields shall only be used as a back-up during peak effluent flows. The depth to groundwater is approximately 180 feet below land surface (bls) and the direction of groundwater flow is to the southwest.

#### Permit Amendment

ADEQ has reviewed and approved this amendment to change the ownership of the facility, add a recharge well as an additional disposal method and to update the closure cost from \$100,000.00 to \$122,353.00. The new closure cost includes the closure cost of the recharge well.

The site includes the following permitted discharging facilities:

Discharging Facility	Latitude	Longitude
Beaver Creek Preserve	34 <sub>0</sub> 39' 25" N	111 <sub>°</sub> 47' 17" W
Recharge Well	34° 39' 41" N	111° 47' 02" W
Subsurface Irrigation Field		
Northwest Corner	34° 39' 24.1" N	111° 47' 11.9" W
Southwest Corner	34° 39' 23.5" N	111° 47' 11.9" W
Northeast Corner	34° 39' 23.8" N	111° 47' 09" W
Southeast Corner	34° 39' 23.3" N	111° 47' 09.1" W

#### Annual Registration Fee [A.R.S. § 49-242 and A.A.C. R18-14-104]

The annual registration fee for this permit is payable to ADEQ each year. The permitted flow for fee calculation is 7,500 gallons per day (gpd).

#### Financial Capability [A.R.S. § 49-243(N) and A.A.C. R18-9-A203]

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The Groundwater Protection Value Stream approved the closure costs of \$122,353.00. The financial capability was demonstrated through A.A.C. R18-9-A203(C)(3) in the amount of \$100,000.00 and (C)(7) in the amount of \$22,353.00.



# 2.2 Best Available Demonstrated Control Technology (BADCT) [A.R.S. § 49-243(B) and A.A.C. R18-9-A202(A)(5)]

The WWTP shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for new facilities as specified in A.A.C. R18-9-B204.

The facility shall meet the requirements for pretreatment by conducting monitoring as per: R18-9-B204(B)(6)(b)(iii).

The treatment facility shall not exceed a maximum seepage rate of 550 gallons per day per acre for all containment structures within the treatment works.

All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the applicable federal, state or local regulations.

#### 2.2.1 Engineering Design

The WWTP was designed as per the design report prepared and stamped, dated, and signed (sealed) by Thomas Lloyd Pender, P.E. (Professional Engineer) of Pender Engineering, dated January 25, 2006, and subsequent sealed submittals that served as additions to the design report.

#### 2.2.2 Site-specific Characteristics

The size and proposed operation of the subsurface irrigation disposal field used site specific data for soil type and infiltration rates as part of the demonstration for disposal capacity. Soil aquifer treatment has been demonstrated to decrease the pathogens to BADCT limits (R18-9-B204(A)(4)(b)) within 10 feet below the surface infiltration.

#### 2.2.3 Pre-operational Requirements

Not Required.

### 2.2.4 Operational Requirements

- 1. The permittee shall maintain a copy of the up-to-date operations and maintenance manual at the treatment facility site at all times; the manual shall be available upon request during inspections by ADEQ personnel.
- 2. The pollution control structures shall be inspected for the items listed in Section 4.2, Table III Facility Inspection (Operational Monitoring).
- 3. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and materials used shall be documented in the facility log book as per Section 2.7.2 and reported to ADEQ in the event of a violation or exceedance as per Section 2.7.3.

#### 2.2.5 Reclaimed Water Classification

[A.A.C. R18-9-703(C)(2)(a), A.A.C. R18-11-303 through 307]

Not Required.

# 2.2.6 Certified Area-wide Water Quality Management Plan Conformance [A.A.C. R18-9-A201(B)(6)(a)]

Facility operations must conform to the approved Certified Area-wide Water Quality Management Plan according to the 208 consistency determination in place at the time of permit issuance.

#### 2.3 Discharge Limitations [A.R.S. §§ 49-201(14), 49-243 and A.A.C. R18-9-A205 (B)]

1. The permittee is authorized to operate the WWTP with a maximum average annual flow of 0.0075 mgd. Flows may be increased to 0.035 mgd as per Section 3.0, Compliance Schedule, item 3.1.



- 2. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BADCT.
- 3. Specific discharge limitations are listed in Section 4.2, Tables IA and IB.

#### 2.4 Point of Compliance (POC) [A.R.S. § 49-244]

The non-hazardous Points of Compliance (POC) have been established at the following locations:

POC#	POC Location	Latitude	Longitude
POC # 1 (Conceptual)	SW Corner of Subsurface Irrigation Field	34° 39' 25" N	111° 47' 17" W

The POC is conceptual; groundwater monitoring is not required at the POCs at permit issuance. The Director may designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

#### 2.5 Monitoring Requirements [A.R.S. § 49-243(K)(1), A.A.C. R18-9-A206(A)]

Unless otherwise specified in this permit, all monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. Unless otherwise provided, monitoring shall commence the first full monitoring period following permit issuance. All sampling, preservation and holding times shall be in accordance with currently accepted standards of professional practice. Trip blanks, equipment blanks and duplicate samples shall also be obtained, and Chain-of-Custody procedures shall be followed, in accordance with currently accepted standards of professional practice. Copies of laboratory analyses and Chain-of-Custody forms shall be maintained at the permitted facility. Upon request, these documents shall be made immediately available for review by ADEQ personnel.

#### 2.5.1 Pre-Operational Monitoring

Not required under the terms of this permit.

#### 2.5.2 Discharge Monitoring

Routine Discharge Monitoring shall be conducted according to Section 4.2, Table I. Flow shall be measured at the point of discharge from the effluent pump station at sampling point 1 and representative samples of the wastewater be collected at the flow meter located at the line going to the effluent discharge at sampling point 2.

#### 2.5.3 Facility / Operational Monitoring

At a minimum, permitted facilities shall be inspected for performance levels listed in Section 4.2, Table III. If damage is identified during an inspection that could cause or contribute to an unauthorized discharge pursuant to A.R.S. § 49-201(12), proper repairs shall be promptly performed. Results of these inspections and monitoring activities shall be documented and maintained at the facility location for at least 10 years, and as required by Section 2.7.2 of this permit.

#### 2.5.4 Groundwater Monitoring and Sampling Protocols

Groundwater monitoring is not required under the terms of this permit.

#### 2.5.5 Surface Water Monitoring and Sampling Protocols

Routine surface water monitoring is not required under the terms of this permit.

#### 2.5.6 Analytical Methodology

All samples collected for compliance monitoring shall be analyzed using Arizona state-approved methods. If no state-approved method exists, then any appropriate EPA-approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. If all methods have detection limits higher than the applicable limit, the permittee shall follow the applicable contingency



requirements of Section 2.6 and may propose "other actions" including amending the permit to set higher limits. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification unless exempted under A.R.S. § 36-495.02. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of Arizona state-certified laboratories can be obtained at the address below:

Arizona Department of Health Services Office of Laboratory Licensure and Certification 250 North 17th Avenue Phoenix, Arizona 85007 Phone: (602) 364-0720

#### 2.5.7 Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative samples required by the permit can be collected. If new groundwater wells are determined to be necessary, the construction details shall be submitted to the Groundwater Protection Value Stream for approval prior to installation and the permit shall be amended to include any new monitoring points.

#### 2.6 Contingency Plan Requirements

[A.R.S. § 49-243(K)(3), (K)(7) and A.A.C. R18-9-A204 and R18-9-A205]

#### 2.6.1 General Contingency Plan Requirements

At least one copy of this permit and the approved contingency and emergency response plan submitted in this amendment application received on January 14, 2020, and shall be maintained at the location where day-to-day decisions regarding the operation of the facility are made. The permittee shall be aware of and follow the contingency and emergency plan.

Any AL exceedance, or violation of an AQL, DL, or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3, unless more specific reporting requirements are set forth in Section 2.6.2 through 2.6.5 below.

Some contingency actions involve verification sampling. Verification sampling shall consist of the first follow-up sample collected from a location that previously indicated a violation or the exceedance of an AL. Collection and analysis of the verification sample shall use the same protocols and test methods to analyze for the pollutant or pollutants that exceeded an AL or violated an AQL or DL. The permittee is subject to enforcement action for the failure to comply with any contingency actions in this permit. Where verification sampling is specified in this permit, it is the option of the permittee to perform such sampling. If verification sampling is not conducted within the timeframe allotted, ADEQ and the permittee shall presume the initial sampling result to be confirmed as if verification sampling had been conducted. The permittee is responsible for compliance with contingency plans relating to the exceedance of an AL or violation of a DL, AQL or any other permit condition.

#### 2.6.2 Exceeding of Alert Levels and Performance Levels

#### 2.6.2.1 Exceeding of Performance Levels Set for Operational Conditions

- 1. For freeboard operational performance levels, the permittee shall comply with the requirements as specified in Section 4.2, Table III (Facility Inspections) to prevent the overtopping of an impoundment or sludge drying bed. If an impoundment or sludge drying bed is overtopped, the permittee shall follow the requirements in Section 2.6.5.3 and the reporting requirements of Section 2.7.3.
- 2. If another operational performance level set in Section 4.2, Table III has been exceeded, the permittee shall:



- Notify the Groundwater Protection Value Stream within five days of becoming aware of the exceedance.
- b. Submit a written report within 30 days after becoming aware of the exceedance. The report shall document all of the following:
  - (1) A description of the exceedance and its cause;
  - (2) the period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue:
  - (3) any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;
  - (4) any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and
  - (5) any malfunction or failure of pollution control devices or other equipment or process.
- 3. The facility is no longer on alert status once the operational indicator no longer indicates that the performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

#### 2.6.2.2 Exceeding of Alert Levels (ALs) Set for Discharge Monitoring

- 1. If an AL set in Section 4.2, Table I has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
  - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameters in question, if necessary to identify the cause of the exceedance.
- 2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 5.0 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
- Within 30 days after an AL exceedance, the permittee shall submit the laboratory
  results to the Groundwater Protection Value Stream, along with a summary of the
  findings of the investigation, the cause of the exceedance, and actions taken to resolve
  the problem.
- 4. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

#### 2.6.2.2.1. Exceeding Permit Flow Limit

1. If the AL for average monthly flow in Section 4.2, Table I has been exceeded, the permittee shall submit an application for an APP amendment to expand the treatment facility or submit a report detailing the reasons that expansion is not necessary.



2. Acceptance of the report instead of an application for expansion requires ADEQ approval.

#### 2.6.3 Discharge Limit Violation

- 1. If a DL set in Section 4.2, Table I has been violated, the permittee shall immediately investigate to determine the cause of the violation. The investigation shall include the following:
  - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
  - Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;
  - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, as necessary to identify the cause of the violation.

The permittee also shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, notification of downstream or downgradient users who may be directly affected by the violation, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

2. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions.

#### 2.6.4 Aquifer Quality Limit Violation

Not applicable - Groundwater monitoring is not required under this permit.

2.6.5 Emergency Response and Contingency Requirements for Unauthorized Discharges pursuant to A.R.S. § 49-201(12) and pursuant to A.R.S. § 49-241

#### 2.6.5.1 Duty to Respond

The permittee shall act immediately to correct any condition resulting from a discharge pursuant to A.R.S. § 49-201(12) if that condition could pose an imminent and substantial endangerment to public health or the environment.

#### 2.6.5.2 Discharge of Hazardous Substances or Toxic Pollutants

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of suspected hazardous substances (A.R.S. § 49-201(19)) or toxic pollutants (A.R.S. § 49-243(I)) on the facility site, the permittee shall promptly isolate the area and attempt to identify the discharged material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, on persons who may have been exposed during the incident. The permittee shall notify the Groundwater Protection Value Stream within 24 hours of discovering the discharge of hazardous material which (a) has the potential to cause an AWQS or AQL exceedance, or (b) could pose an endangerment to public health or the environment.

#### 2.6.5.3 Discharge of Non-hazardous Materials

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of non-hazardous materials from the facility, the permittee shall promptly attempt to cease the discharge and isolate the discharged material. Discharged material shall be removed and the site cleaned up



as soon as possible. The permittee shall notify the Groundwater Protection Value Stream within 24 hours of discovering the discharge of non-hazardous material which has the potential to cause an AQL exceedance or could pose an endangerment to public health or the environment.

#### 2.6.5.4 Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to the Groundwater Protection Value Stream within 30 days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

#### 2.6.6 Corrective Actions

Specific contingency measures identified in Section 2.6 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Groundwater Protection Value Stream prior to implementing a corrective action to accomplish any of the following goals in response to exceedance of an AL or violation of an AQL, DL, or other permit condition:

- 1. Control of the source of an unauthorized discharge;
- 2. Soil cleanup;
- 3. Cleanup of affected surface waters;
- 4. Cleanup of affected parts of the aquifer;
- 5. Mitigation to limit the impact of pollutants on existing uses of the aquifer.

Within 30 days of completion of any corrective action, the operator shall submit to the Groundwater Protection Value Stream, a written report describing the causes, impacts, and actions taken to resolve the problem.

#### 2.7 Reporting and Recordkeeping Requirements

[A.R.S. § 49-243(K)(2) and A.A.C. R18-9-A206(B) and R18-9-A207]

#### 2.7.1 Self-Monitoring Report Form

- 1. The permittee shall complete the Self-Monitoring Reporting Forms (SMRFs) provided by ADEQ, and submit the completed report through the myDEQ online reporting system.
- 2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter "not required" on the form, include an explanation.
- 3. The tables contained in Section 4.2 list the monitoring parameters and the frequencies for reporting results on the SMRF:
  - Table I, Routine Discharge Monitoring

The parameters listed in the above-identified tables from Section 4.2 are the only parameters for which SMRF reporting is required.

### 2.7.2 Operation Inspection / Log Book Recordkeeping

A signed copy of this permit shall be maintained at all times at the location where day-to-day decisions regarding the operation of the facility are made. A log book (paper copies, forms, or electronic data) of the inspections and measurements required by this permit shall be maintained at the location where



day-to-day decisions are made regarding the operation of the facility. The log book shall be retained for ten years from the date of each inspection, and upon request, the permit and the log book shall be made immediately available for review by ADEQ personnel. The information in the log book shall include, but not be limited to, the following information as applicable:

- 1. Name of inspector;
- 2. Date and time inspection was conducted;
- 3. Condition of applicable facility components;
- 4. Any damage or malfunction, and the date and time any repairs were performed;
- 5. Documentation of sampling date and time; and
- 6. Any other information required by this permit to be entered in the log book.
- 7. Monitoring records for each measurement shall comply with A.A.C. R18-9-A206(B)

#### 2.7.3 Permit Violation and Alert Level Status Reporting

- 1. The permittee shall notify the Groundwater Protection Value Stream in writing within five days (except as provided in Section 2.6.5) of becoming aware of a violation of any permit condition, discharge limitation, or of an AL exceedance.
- 2. The permittee shall submit a written report to the Groundwater Protection Value Stream within 30 days of becoming aware of the violation of any permit condition, AQL, or DL. The report shall document all of the following:
  - a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
  - b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue;
  - c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
  - d. Any monitoring activity or other information, which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS;
  - e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring; and
  - Description of any malfunction or failure of pollution control devices or other equipment or processes.

## 2.7.4 Operational, Other or Miscellaneous Reporting

The permittee shall record the information requested in Section 4.2, Table III in the facility log book as per Section 2.7.2, and report to ADEQ any violations or exceedances as per Section 2.7.3.

#### 2.7.5 Reporting Location

Through the myDEQ portal accessible on the ADEQ website at: <a href="http://www.azdeq.gov/welcome-mydeq">http://www.azdeq.gov/welcome-mydeq</a>

All other documents required by this permit to be submitted to the Groundwater Protection Value Stream shall be directed to:

Arizona Department of Environmental Quality Groundwater Protection Value Stream Mail Code 5415B-3 1110 West Washington Street Phoenix, Arizona 85007 Phone (602) 771-4999

## 2.7.6 Reporting Deadline

The following table lists the quarterly report due dates:



Monitoring conducted during quarter:	Quarterly Report due by:	
January-March	April 30	
April-June	July 30	
July-September	October 30	
October-December	January 30	

#### 2.7.7 Changes to Facility Information in Section 1.0

The Groundwater Protection Value Stream shall be notified within ten days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person, or Emergency Telephone Number.

#### 2.8 Temporary Cessation [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A209(A)]

The permittee shall give written notice to the Groundwater Protection Value Stream before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

- 1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;
- 2. Correct the problem that caused the temporary cessation of the facility; and
- 3. Notify the Groundwater Protection Value Stream with a monthly facility status report describing the activities conducted on the treatment facility to correct the problem.
- 4. Submittal of Self-Monitoring Report Forms (SMRFs) is still required; report "temporary cessation" in the comment section.

At the time of notification, the permittee shall submit for ADEQ approval a plan for maintenance of discharge control systems and for monitoring during the period of temporary cessation. Immediately following ADEQ approval, the permittee shall implement the approved plan. If necessary, ADEQ shall amend permit conditions to incorporate conditions to address temporary cessation. During the period of temporary cessation, the permittee shall provide written notice to the Groundwater Protection Value Stream of the operational status of the facility every three years. If the permittee intends to permanently cease operation of any facility, the permittee shall submit closure notification, as set forth in Section 2.9 below.

#### 2.9 Closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9-A209(B)]

For a facility addressed under this permit, the permittee shall give written notice of closure to the Groundwater Protection Value Stream of the intent to cease operation without resuming activity for which the facility was designed or operated. Submittal of SMRFs is still required; report "closure in process" in the comment section.

#### 2.9.1 Closure Plan

Within 90 days following notification of closure, the permittee shall submit for approval to the Groundwater Protection Value Stream, a closure plan which meets the requirements of A.R.S. § 49-252 and A.A.C. R18-9-A209(B)(3).

If the closure plan achieves clean-closure immediately, ADEQ shall issue a letter of approval to the permittee. If the closure plan contains a schedule for bringing the facility to a clean-closure configuration at a future date, ADEQ may incorporate any part of the schedule as an amendment to this permit.

#### 2.9.2 Closure Completion

Upon completion of closure activities, the permittee shall give written notice to the Groundwater Protection Value Stream indicating that the approved closure plan has been implemented fully and



providing supporting documentation to demonstrate that clean-closure has been achieved (soil sample results, verification sampling results, groundwater data, as applicable). If clean-closure has been achieved, ADEQ shall issue a letter of approval to the permittee at that time. If any of the following conditions apply, the permittee shall follow the terms of post-closure stated in this permit:

- 1. Clean-closure cannot be achieved at the time of closure notification or within one year thereafter under a diligent schedule of closure actions;
- 2. Further action is necessary to keep the facility in compliance with the AWQS at the applicable POC:
- Continued action is required to verify that the closure design has eliminated discharge to the extent intended;
- Remediation or mitigation measures are necessary to achieve compliance with Title 49, Ch. 2;
   and
- 5. Further action is necessary to meet property use restrictions.

#### 2.10 Post-closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9 A209(C)]

Post-closure requirements shall be established based on a review of facility closure actions and will be subject to review and approval by the Groundwater Protection Value Stream.

In the event clean-closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the Groundwater Protection Value Stream a post-closure plan that addresses post-closure maintenance and monitoring actions at the facility. The post-closure plan shall meet all requirements of A.R.S. §§ 49-201(30) and 49-252 and A.A.C. R18-9-A209(C). Upon approval of the post-closure plan, this permit shall be amended, or a new permit shall be issued to incorporate all post-closure controls and monitoring activities of the post-closure plan.

#### 2.10.1 Post-Closure Plan

A specific post-closure plan may be required upon the review of the closure plan.

#### 2.10.2 Post-Closure Completion

Not required at the time of permit issuance.



# 3.0 COMPLIANCE SCHEDULE [A.R.S. § 49-243(K)(5) and A.A.C. R18-9-A208]

Unless otherwise indicated, for each compliance schedule item listed below, the permittee shall submit the required information to the Groundwater Protection Value Stream.

No.	Description	Due by:	Permit Amendment Required?
3.1	The permittee shall submit an amendment application to propose additional disposal method to increase the discharge limit of flow above 0.0075 mgd.	90 days prior to increasing the flows.	Yes
3.2	The permittee shall submit a demonstration that the financial assurance mechanism listed in Section 2.1, Financial Capability, is being maintained as per A.R.S. 49-243.N.4 and A.A.C. R18-9-A203(H) for all estimated closure and post-closure costs including updated costs submitted under Section 3.2, below. The demonstration shall include a statement that the closure and post-closure strategy has not changed, the discharging facilities listed in the permit have not been altered in a manner that would affect the closure and post-closure costs and discharging facilities have not been added. The demonstration shall also include information in support of a Certificate of Deposit as required in A.A.C. R18-9-A203(C)(3) (\$100,000.00). There is an addition demonstration A.A.C. R18-9-A203(C)(7) (\$22,353.00). Total cost estimate \$122,353.00	By May 31, 2026 and every six (6) years, for the duration of the permit.	No
3.3	The permittee shall submit updated cost estimates for facility closure and post-closure, as per A.A.C. R18-9-A201 (B)(5) and A.R.S. 49-243.N.2.a.	By May 31, 2026 and every 6 years thereafter.	Yes



## 4.0 TABLES OF MONITORING REQUIREMENTS

## 4.1 PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

Not applicable at permit issuance

# 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE I: Routine Discharge Monitoring TABLE III: Facility Inspections Monitoring



#### 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

#### TABLE I ROUTINE DISCHARGE MONITORING

Sampling Point Number	Sampling P	oint Identifica	Latitude	Longitude	
1	Point of discharge from the effluent pump station			34° 39' 25" N	111° 47' 17" W
Parameter	<b>AL</b> 1	$\mathbf{DL}_2$	Units	Sampling Frequency	Reporting Frequency
Total Flow3: Daily4	Not Establisheds	Not Established	mgd <sub>6</sub>	Daily	Quarterly
Total Flow: Monthly Average7	0.007125	0.007125 0.0075 mgd		Monthly Calculation	Quarterly
Flow to Recharge: Daily	Not Established	Not Established Not Established mgd		Daily	Quarterly
Flow to Recharge: Monthly Average	0.007125	0.0075	mgd	Monthly Calculation	Quarterly
Sampling Point Number	Sampling P	oint Identifica	tion	Latitude	Longitude
2		Flow meter located at line going to discharge			111° 47' 09.1" W
Fecal Coliform: Single sample maximum	Not Established	23	CFU <sub>8</sub>	Daily <sub>9</sub>	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week <sub>10</sub>	Not Established	Non- detect11	CFU	Weekly Evaluation	Quarterly
Total Nitrogen <sub>12</sub> : Five-sample rolling geometric mean <sub>13</sub>	8.0	10.0	mg/l <sub>14</sub>	Monthly Calculation	Quarterly

<sup>1</sup> AL = Alert Level

<sup>2</sup> DL = Discharge Limit

<sup>3</sup> Total flow for all methods of disposal for Recharge and Subsurface.

<sup>4</sup> Flow shall be measured using a continuous recording flow meter which totals the flow daily.

<sup>5</sup> Not Established means monitoring is required but no limits are specified.

<sup>6</sup> mgd = million gallons per day

<sup>7</sup> Monthly average of daily flow values.

<sup>8</sup> CFU = Colony Forming Units / 100 ml sample. For CFU, a value of <1 shall be considered to be non-detect.

<sup>9</sup> For Fecal Coliform **only**, "daily" sampling means every day in which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four (4) samples in each week are obtained and analyzed.

<sup>10</sup> **Week** means the seven-day period starting on Sunday and ending on the following Saturday. The reporting form for this parameter consists of 13 weeks per quarter.

<sup>11</sup> Fecal Coliform four (4) of seven (7) samples requires entering "Compliance" or "Non-compliance" on the SMRF for each week of the reporting period. Evaluate the daily Fecal Coliform results for that week (Sunday through Saturday). If, of these seven (7) days, four (4) or more of the daily Fecal Coliform results are non-detect, report "Compliance" for that week's entry on the SMRF. If three (3) or fewer of the daily Fecal Coliform results are non-detect, report "Non-compliance" for that week's entry on the SMRF.

<sup>12</sup> Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

<sup>13</sup> The five-sample rolling geometric mean is determined by multiplying the five (5) most recent monthly sample values together then taking the fifth root of the product. Example:  $GMs = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$ 

<sup>14</sup> mg/l = milligrams per liter



## 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

# TABLE I ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
Metals (total):					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly



# 4.2 TABLES OF MONITORING REQUIREMENTS

TABLE I ROUTINE DISCHARGE MONITORING (continued)

Parameter	AL	DL	Units	Sampling Frequency	Reporting Frequency
Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs):					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total)15	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

<sup>15</sup> Total Trihalomethanes are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane.



### 4.2 COMPLIANCE (or OPERATIONAL) MONITORING

#### TABLE III FACILITY INSPECTION - LOG BOOK 16

Pollution Control Structure/Parameter	Performance Level	Inspection Frequency
Pump Integrity	Good working condition	Weekly
Treatment Plant Components	Good working condition	Weekly
Direct Injection Well	Good working condition No biofouling No clogging No daylighting	Monthly
Leach field	No standing Water	Weekly when in use

<sup>&</sup>lt;sup>16</sup> The permittee shall record the inspection performance levels in a log book as per Section 2.7.2 and report any violations or exceedances as per Section 2.7.3. In the case of an exceedance, identify which structure exceeds the performance level in the log book.



### 5.0 REFERENCES AND PERTINENT INFORMATION

The terms and conditions set forth in this permit have been developed based upon the information contained in the following, which are on file with the Department:

1. APP Application dated: January 14, 2020

2. Contingency Plan, dated: November 26, 2019

3. Final Engineering Memo dated: March 11, 2020

4. Final Hydrologist Memo dated: March 31, 2020

5. Financial Review Memo dated: March 4, 2020

6. Public Notice date: TBD



#### 6.0 NOTIFICATION PROVISIONS

#### 6.1 Annual Registration Fees

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based on the amount of daily influent or discharge of pollutants in gallons per day (gpd) as established by A.R.S. § 49-242.

#### 6.2 Duty to Comply [A.R.S. §§ 49-221 through 263]

The permittee is notified of the obligation to comply with all conditions of this permit and all applicable provisions of Title 49, Chapter 2, Articles 1, 2 and 3 of the Arizona Revised Statutes, Title 18, Chapter 9, Articles 1 through 4, and Title 18, Chapter 11, Article 4 of the Arizona Administrative Code. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to Title 49, Chapter 2, Article 4 or permit amendment, suspension, or revocation.

#### 6.3 Duty to Provide Information [A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]

The permittee shall furnish to the Director, or an authorized representative, within a time specified, any information which the Director may request to determine whether cause exists for amending or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

# 6.4 Compliance with Aquifer Water Quality Standards [A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]

The permittee shall not cause or contribute to a violation of an Aquifer Water Quality Standard (AWQS) at the applicable point of compliance (POC) for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

# 6.5 Technical and Financial Capability [A.R.S. §§ 49-243(K)(8) and 49-243(N) and A.A.C. R18-9-A202(B) and R18-9-A203(E) and (F)]

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(C), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

#### 6.6 Reporting of Bankruptcy or Environmental Enforcement [A.A.C. R18-9-A207(C)]

The permittee shall notify the Director within five days after the occurrence of any one of the following:

- 1. the filing of bankruptcy by the permittee; or
- 2. the entry of any order or judgment not issued by the Director against the permittee for the enforcement of any environmental protection statute or rule.

#### 6.7 Monitoring and Records [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]

The permittee shall conduct any monitoring activity necessary to assure compliance with this permit, with the applicable water quality standards established pursuant to A.R.S. §§ 49-221 and 49-223 and §§ 49-241 through 49-252.



#### 6.8 Inspection and Entry [A.R.S. §§ 49-1009, 49-203(B), and 49-243(K)(8)]

In accordance with A.R.S. §§ 41-1009 and 49-203(B), the permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter and inspect the facility as reasonably necessary to ensure compliance with Title 49, Chapter 2, Article 3 of the Arizona Revised Statutes, and Title 18, Chapter 9, Articles 1 through 4 of the Arizona Administrative Code and the terms and conditions of this permit.

#### 6.9 Duty to Modify [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]

The permittee shall apply for and receive a written amendment before deviating from any of the designs or operational practices authorized by this permit.

# 6.10 Permit Action: Amendment, Transfer, Suspension, and Revocation [A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Protection Value Stream in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

#### 7.0 ADDITIONAL PERMIT CONDITIONS

#### 7.1 Other Information [A.R.S. § 49-243(K)(8)]

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit the correct facts or information.

# 7.2 Severability [A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition.

#### 7.3 Permit Transfer

This permit may not be transferred to any other person except after notice to and approval of the transfer by the Department. No transfer shall be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).